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(57) Abstract: A probe comprising support (12) of a gold wire and, fixed thereon, intermediate excited medium (18a) having been excited to an excited triplet state by supply of external energy thereto, wherein transfer of excited triplet energy is effected from the intermediate excited medium toward a first molecule having a residue with bonding capability. The first molecule having thus been excited by the transfer of excited triplet energy is bonded with a second molecule having a residue with bonding capability as a bonding target to be bonded with the first molecule.